

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Original) A method of correcting frequency errors occurring in a multipath input signal of a receiver of a mobile radio terminal, the method using one of three different frequency error processing modes, respectively a processing mode with no frequency error correction, an open-loop processing mode for coarse frequency error correction, and a closed-loop processing mode for fine frequency error correction, the frequency error processing mode being selected by a central control unit as a function both of the value of the frequency error and of a quality factor determined by a quality control unit of a channel coefficient filter.

2. (Currently Amended) A method according to claim 1, including a preliminary step of estimating the frequency error occurring in the multipath input signal from ~~the~~ an impulse response of ~~the~~ a propagation channel of said input signal, said frequency error being estimated by way of a phase error estimate.

3. (Original) A method according to claim 2, wherein the phase error caused by the frequency error is estimated on the most powerful path.

4. (Original) A method according to claim 2, wherein the frequency error is estimated with a variable period.
5. (Original) A method according to claim 2, wherein the estimated frequency error is filtered in accordance with a plurality of frequency error estimates to obtain an averaged frequency error.
6. (Currently Amended) A method according to claim 1, wherein the quality factor is used to monitor the ~~effieacy~~efficiency of channel coefficient filtering.
7. (Original) A method according to claim 6, wherein the quality factor is determined as a function of a signal-to-interference ratio.
8. (Original) A device for correcting frequency errors occurring in a multipath input signal of a receiver of a mobile radio terminal able to communicate with a remote sender via a propagation channel, the device comprising a central control unit adapted to use three different frequency error processing modes, respectively a processing mode with no frequency error correction, an open-loop processing mode for coarse frequency error correction, and a closed-loop processing mode for fine frequency error correction, the frequency error processing mode being selected by a central control unit as a function both of the value of the frequency error and of a quality factor determined by a quality control unit of a channel coefficient filter.

9. (Original) A device according to claim 8, further comprising a frequency error estimator associated with a frequency error estimate filter to supply the frequency error value to the central control unit.

10. (Original) A device according to claim 8, further comprising, for effecting the coarse frequency error correction, both a channel estimate corrector adapted to supply the channel filter with an impulse response of the propagation channel free of the frequency error and a propagation channel impulse response processor adapted to reintroduce the frequency error into the filtered propagation channel impulse response.

11. (Original) A device according to claim 8, further comprising, for fine frequency error correction, a closed loop consisting of an averaged frequency error filter associated with a frequency corrector which receives as input the multipath signal and supplies as output a multipath signal free of the frequency error.